CLAIMS

1. A method of replacing gas in a fuel cell system, comprising the steps of:

detecting that a fuel cartridge is connected to a fuel cell system comprising a fuel cell; and

supplying a fuel from the fuel cartridge on the basis of the detection to start replacement of gas in the fuel cell system.

2. The method according to claim 1, wherein the gas replacement is performed for a predetermined period of time.

3. The method according to claim 1, wherein the gas in the fuel cell system is discharged through a purge valve provided in the fuel cell system based on the detection.

4. The method according to claim 1, wherein the replacement of the gas in the fuel cell system is performed until an output voltage of the fuel cell becomes a predetermined value or more.

5. A method of replacing gas in a fuel cell system, comprising the steps of:

detecting an output voltage of a fuel cell provided in a fuel cell system; and

when the output voltage becomes a predetermined value or less, supplying a fuel from a fuel cartridge to start replacement of gas in the fuel cell system.

6. The method according to claim 5, wherein the replacement of the gas in the fuel cell system is performed until the output voltage of the fuel cell becomes the predetermined value or more.

7. The method according to claim 5, wherein the gas replacement is performed for a predetermined period of time.

8. The method according to claim 5, wherein when the output voltage becomes the predetermined value or less, the gas in the fuel cell system is discharged through a purge valve provided in the fuel cell system.

9. A method of replacing gas in a fuel cell system, comprising the steps of:

detecting an output voltage of a fuel cell provided in a fuel cell system; and

when the output voltage becomes a predetermined value or less, supplying a fuel from a fuel tank provided in the fuel cell system to start replacement of gas in the fuel cell system.

10. The method according to claim 9, wherein the gas replacement is performed for a predetermined period of time.

11. The method according to claim 9, wherein when the output voltage becomes the predetermined value or less, the gas in the fuel cell system is discharged through a purge valve provided in the fuel

cell system.

12. The method according to claim 9, wherein the replacement of the gas in the fuel cell system is performed until the output voltage of the fuel cell becomes the predetermined value or more.

13. A method of replacing gas in a fuel cell system attached to a device, comprising the step of, when a switch of a device to which a fuel cell system is attached is turned on, supplying a fuel from a fuel cartridge to start replacement of gas in the fuel cell system.

14. The method according to claim 13, wherein the switch is a main switch of the device.

15. The method according to claim 13, wherein the switch is a power source switch of the device.

16. The method according to claim 13, wherein the switch is a switch other than a main switch of the device.

17. The method according to claim 13, wherein the switch is a switch other than a power source switch of the device.

18. The method according to claim 13, wherein the replacement of the gas in the fuel cell system is performed until an output voltage of a fuel cell provided in the fuel cell system becomes a predetermined value or more.

19. The method according to claim 13, wherein

the gas replacement is performed for a predetermined period of time.

20. The method according to claim 13, wherein the gas in the fuel cell system is discharged through a purge valve provided in the fuel cell system.

21. A method of replacing gas in a fuel cell system attached to a device, comprising the step of, when a switch of a device to which a fuel cell system is attached is turned on, supplying a fuel from a fuel tank provided in the fuel cell system to start replacement of gas in the fuel cell system.

22. The method according to claim 21, wherein the switch is a main switch of the device.

23. The method according to claim 21, wherein the switch is a power source switch of the device.

24. The method according to claim 21, wherein the switch is a switch other than a main switch of the device.

25. The method according to claim 21, wherein the switch is a switch other than a power source switch of the device.

26. The method according to claim 21, wherein the replacement of the gas in the fuel cell system is performed until an output voltage of a fuel cell provided in the fuel cell system becomes a predetermined value or more.

27. The method according to claim 21, wherein

the gas replacement is performed for a predetermined period of time.

28. The method according to claim 21, wherein the gas in the fuel cell system is discharged through a purge valve provided in the fuel cell system.

29. A fuel cell system, comprising:

a fuel cell;

a connecting part for connecting a fuel cartridge; and

a sensor for detecting that the fuel cartridge is connected to the connecting part,

wherein a fuel is supplied from the fuel cartridge connected to the connecting part on the basis of the detection by the sensor to start replacement of gas in the fuel cell system.

30. The fuel cell system according to claim 29, wherein the gas replacement is performed by a control means provided in a device to which the fuel cell system is attached, on the basis of the detection by the sensor.

31. The fuel cell system according to claim 29, further comprising a control means, wherein the control means performs the gas replacement on the basis of the detection by the sensor.

32. The fuel cell system according to claim 29, wherein the gas replacement is performed for a predetermined period of time.

33. The fuel cell system according to claim 29, further comprising a purge valve, wherein the purge valve opens on the basis of the detection to discharge gas in the fuel cell system.

34. The fuel cell system according to claim 29, further comprising a voltage detector for detecting an output voltage of the fuel cell, wherein the gas replacement is performed until the output voltage detected by the voltage detector becomes a predetermined value or more.

35. A fuel cell system, comprising:

a fuel cell;

a connecting part for connecting a fuel cartridge; and

a voltage detector for detecting an output voltage of the fuel cell,

wherein when the output voltage detected by the voltage detector becomes a first predetermined value or less, a fuel is supplied from the fuel cartridge connected to the connecting part to start replacement of gas in the fuel cell system.

36. The fuel cell system according to claim 35, wherein the gas replacement is performed by a control means provided in a device to which the fuel cell system is attached, on the basis of the detection by the sensor.

37. The fuel cell system according to claim 35,

further comprising a control means, wherein the gas replacement is performed by the control means on the basis of the detection by the sensor.

38. The fuel cell system according to claim 35, wherein after the start of the gas replacement, the gas replacement is continued until the output voltage of the fuel cell becomes a second predetermined value or more.

39. The fuel cell system according to claim 35, wherein the gas replacement is performed for a predetermined period of time.

40. The fuel cell system according to claim 35, further comprising a purge valve, wherein the purge valve discharges the gas in the fuel cell system when the output voltage becomes a predetermined value or less.

41. A fuel cell system, comprising:

a fuel cell;

a fuel tank; and

a voltage detector for detecting an output voltage of the fuel cell,

wherein when the output voltage detected by the voltage detector becomes a first predetermined value or less, a fuel is supplied from the fuel tank to start replacement of gas in the fuel cell system.

42. The fuel cell system according to claim 41, wherein the gas replacement is performed by a control

means provided in a device to which the fuel cell system is attached, on the basis of the detection by the sensor.

43. The fuel cell system according to claim 41, further comprising a control means, wherein the gas replacement is performed by the control means on the basis of the detection by the sensor.

44. The fuel cell system according to claim 41, wherein after the start of the gas replacement, the gas replacement is continued until the output voltage of the fuel cell becomes a second predetermined value or more.

45. The fuel cell system according to claim 41, wherein the gas replacement is performed for a predetermined period of time.

46. The fuel cell system according to claim 41, further comprising a purge valve, wherein the purge valve discharges the gas in the fuel cell system when the output voltage becomes a predetermined value or less.

47. A device for a fuel cell system, comprising:

an attaching part for attaching a fuel cell system; and

a switch provided in the device,

wherein a fuel is supplied from a fuel cartridge connected to the fuel cell system in

response to turn-on of the switch to start replacement of gas in the fuel cell system.

48. The device according to claim 47, further comprising a control means, wherein the control means supplies the fuel from the fuel cartridge connected to the fuel cell system on the basis of the turn-on of the switch to starts the replacement of the gas in the fuel cell system.

49. The device according to claim 47, wherein the fuel cell system comprises a control means, and the control means supplies the fuel from the fuel cartridge connected to the fuel cell system on the basis of the turn-on of the switch to start the replacement of the gas in the fuel cell system.

50. The device according to claim 47, wherein the switch is a main switch of the device.

51. The device according to claim 47, wherein the switch is a power source switch of the device.

52. The device according to claim 47, wherein the switch is a switch other than a main switch of the device.

53. The device according to claim 47, wherein the switch is a switch other than the power source switch of the device.

54. A device for a fuel cell system, comprising:

a fuel cell system comprising a fuel cell and a

connecting part for connecting a fuel cartridge; and

a switch provided in the device,

wherein a fuel is supplied from the fuel cartridge connected to the fuel cell system in response to turn-on of the switch to start replacement of gas in the fuel cell system.

55. The device according to claim 54, further comprising a control means, wherein the control means supplies the fuel from the fuel cartridge connected to the fuel cell system on the basis of the turn-on of the switch to start the replacement of the gas in the fuel cell system.

56. The device according to claim 54, wherein the fuel cell system further comprises a control means, wherein the control means supplies the fuel from the fuel cartridge connected to the fuel cell system on the basis of the turn-on of the switch to start the replacement of the gas in the fuel cell system.

57. The device according to claim 54, wherein the switch is a main switch of the device.

58. The device according to claim 54, wherein the switch is a power source switch of the device.

59. The device according to claim 54, wherein the switch is a switch other than a main switch of the device.

60. The device according to claim 54, wherein

the switch is a switch other than the power source switch of the device.

61. A device for a fuel cell system, comprising:

a fuel cell system comprising a fuel cell and a fuel tank; and

a switch provided in the device,

wherein a fuel is supplied from the fuel tank of the fuel cell system in response to turn-on of the switch to start replacement of gas in the fuel cell system.

62. The device according to claim 61, further comprising a control means, wherein the control means supplies the fuel from the fuel tank of the fuel cell system on the basis of the turn-on of the switch to start the replacement of the gas in the fuel cell system.

63. The device according to claim 61, wherein the fuel cell system further comprises a control means, wherein the control means supplies the fuel from the fuel tank of the fuel cell system on the basis of the turn-on of the switch to start the replacement of the gas in the fuel cell system.

64. The device according to claim 61, wherein the switch is a main switch of the device.

65. The device according to claim 61, wherein the switch is a power source switch of the device.

66. The device according to claim 61, wherein the switch is a switch other than a main switch of the device.

67. The device according to claim 61, wherein the switch is a switch other than the power source switch of the device.